Objective 9.1 Reduce deaths caused by unintentional injuries to no more than 29.3 per 100,000 people.

	1987 Baseline	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	2000 Target
Unintentional Injury Deaths (age-adjusted per 100,000) ICD-9 Codes: E800-E949 ^Data are provisional	34.7	35.0	33.9	32.5	31.0	29.4	30.3	30.3	30.5	30.4	30.1	29.3
Special Population Targets												
91.a American Indians/Alaska Natives	66.0	64.4	61.8	59.0	58.3	57.3	58.1	58.3	56.7	57.6	58.5	53.0
9.1b Black Males	68.0	70.4	68.8	62.4	61.0	56.7	59.8	58.5	57.6	55.7	54.2	51.9
9.1c White Males	49.8	50.0	47.8	46.4	43.9	41.9	42.7	42.7	43.0	42.4	42.0	42.9
9.1d Mexican American Males				53.3 (Baseline)	47.2	46.5	48.6	46.1	44.6	45.4		43.0

Barriers:

Perception that unintentional injuries are unavoidable and occur as a matter of happenstance or as an act of fate.

Unintentional injuries are associated with low socio-economic status, sub-standard living conditions, minority origin, and use of alcohol.

Limited number of states have a core unintentional injury prevention program at the state level.

Indian reservations have a disproportionate rate of unintentional injuries, especially motor vehicle and pedestrian fatalities many of which are alcohol-related.

Costs of choosing risky behaviors are not emphasized.

Medical care for persons who suffer an injury in rural areas is severely hampered by lengthy EMS response time due to rural road conditions and distance to nearest trauma care center.

Strategies:

Raise awareness that injuries are not "accidents", and that they can be prevented by behavioral and environmental changes.

Support the development and implementation of integrated prevention programs that target populations most affected by specific types of injuries..

Coordinate efforts of Federal agencies, states, national organizations, and grassroot affiliates in the development and implementation of strategies to prevent unintentional injuries.

Emphasize the substantial risk posed by alcohol for all unintentional injuries.

Support surveillance efforts to characterize those at risk for unintentional injuries and to develop and evaluate prevention programs.

Develop methodologic strategies to calculate the cost of unintentional injuries.

Data Sources: *National Vital Statistics System, National Center for Health Statistics, CDC*

Additional Data: *Indian Health Service (American Indians/Alaskan Natives)*

Objective 9.2 Reduce nonfatal unintentional injuries so that hospitalizations for this condition are no more than 754 per 100,000 people.

	1989 Baseline	1990	1991	1992	1993	1994	1995	1996	1997	2000 Target
Nonfatal unintentional injuries (per 100,000)* ICD-9 codes: 800-959	832	780	764	714	699	654	635	612	582	754
Special Population Target										
9.2a Black Males			1007 (Baseline)	969	893	847	911	730	637	856
*Data include unintentional, intentional, and unknown intentionality. Total Population										

Barriers:

Social norms are often not conducive to preventive actions

Poor diffusion of intervention strategies to the public, health care providers, or the prevention community

Lack of a coordinated and synergistic response to various injury issues by stakeholders at the national, state, and local levels.

Theory-driven, proven intervention programs have not been fully researched for some major injury causes

Media coverage for unintentional injury issues is not as frequent or dramatic as coverage for some other health problems that are not as prevalent or economically burdensome.

Current data tracking system includes all injuries regardless of intentionality

Resources for unintentional injury programs are often given low priority compared to other health issues that occur with less frequency and create medical expense

Strategies:

Educate the media about the preventability of unintentional injuries and the critical need to help the public understand that "injuries are not accidents"

Review the National Plan for Injury Control and develop a coordinated effort among governmental agencies, private sector organizations, professional associations, etc. to implement collaborative strategies

Encourage emergency departments to conduct routine blood alcohol assessment, counseling and treatment referral for persons injured because of their own alcohol use or abuse

Educate policy-makers, public health professionals, and stakeholders at state and national levels about the critical need to include unintentional injuries in their strategic plans for prevention

Support the implementation of known strategies that contribute to reducing the incidence of nonfatal unintentional injuries, such as community-based programs and awareness campaigns designed to change social norms

Develop multi-disciplinary partnerships that work toward implementing recommendations for a national injury surveillance system and theory-driven, proven interventions for unintentional injuries.

Data Source: *National Hospital Discharge Survey, National Center for Health Statistics, CDC*

Objective 9.3 Reduce deaths caused by motor vehicle crashes to no more than 1.5 per 100 million vehicle miles traveled and 14.2 per 100,000 people.

Motor Vehicle Crash Deaths	1987 Baseline	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	2000 Target
Per 100 million vehicle miles traveled (VMT)	2.4	2.3	2.2	2.1	1.9	1.7	1.7	1.7	1.7	1.7	1.6	1.5
Per 100,000 people	19.2	19.3	18.5	17.9	16.5	15.4	15.6	15.6	15.9	15.9	15.7	14.2
Special Population Targets (Per 100,000)												
9.3a Children aged 14 and younger	6.3	6.3	5.9	5.3	5.1	4.8	4.9	5.1	4.9	4.8	4.6	4.4
9.3b Youth aged 15-24	36.3	37.1	33.9	33.4	31.4	28.0	28.5	28.9	29.9	28.9	27.4	26.8
9.3c People aged 70 and older	22.9	24.3	23.9	22.9	23.4	21.9	22.9	23.3	23.3	23.3	23.9	20.0
9.3d American Indians/Alaskan Natives	37.7	36.2	34.4	33.2	33.4	32.0	32.3	31.4	33.1	34.0	32.3	32.0
9.3g Mexican Americans				20.9	18.9 (Baseline)	17.5	18.1	18.7	17.7	18.0	---	18.0
Type-Specific Targets												
9.3e Motorcyclists (100,000 million VMT)	42.5	36.5	30.3	33.8	30.6	25.1	24.0	22.7	22.7	21.8	20.9	25.6
(Per 100,000 population)	1.7	1.5	1.3	1.3	1.1	0.9	0.9	0.9	0.9	0.8	0.8	0.9
9.3f Pedestrians (per 100,000 population)	2.8	2.7	2.6	2.6	2.3	2.2	2.2	2.1	2.1	2.0	2.0	2.0

Objective 9.3 Reduce deaths caused by motor vehicle crashes to no more than 1.5 per 100 million vehicle miles traveled and 14.2 per 100,000 people.

Barriers:

Alcohol is a major contributing factor in nearly 40% of all motor vehicle crash deaths, and the repeal of state speed limit laws.

Lack of access to child safety seats and booster seats among persons in low social-economic status and minority groups.

Lack of sufficient detail in data such as specific causes of crash.

Older automobiles do not have newer safety features such as air bags and anti-lock brakes.

Larger proportions of Americans are driving at older ages, and are at higher risk of serious injury or death if involved in a crash.

Strategies:

Promote passage of primary enforcement safety belt and universal helmet laws in states and Indian Reservations.

Improve driver screening and training programs, especially for new drivers and seniors.

Promote adoption of graduated licensing programs in all states.

Evaluate the effectiveness of programs that promote the use of safety belts, child restraints, and airbags.

Promulgate regulations to make vehicles safer.

Establish data linkages between police and hospital records and other non-fatal injury records to enhance early detection of shifts in trends, and conduct better evaluate prevention strategies and economic costs associated with motor vehicle injuries.

Employ media more effectively to inform the public of risks associated with drinking and driving and other risky behaviors.

Encourage blood alcohol content (BAC) testing in states with low test-rate to enhance existing surveillance methods.

Data Sources:
Fatal Accident Reporting System (FARS), U. S. Department of Transportation; Indian Health Service (American Indians/Alaskan Natives)

Objective 9.4:Reduce deaths from falls and fall-related injuries to no more than 2.3 per 100,000 people.

	1987 Baseline	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	2000 Target
Fall-Related Deaths (per 100,000) ICD-9 codes: E880-888 (age-adjusted)	2.7	2.7	2.6	2.7	2.6	2.5	2.5	2.5	2.6	2.7	2.7	2.3
Special Population Targets												
9.4a People aged 65-84	18.1	18.0	18.0	17.8	18.0	17.6	17.8	18.3	18.5	19.9	20.7	14.4
9.4b People aged 85 and older	133.0	144.1	141.6	143.1	147.5	147.3	149.5	147.0	152.0	159.6	160.3	105.0
9.4c Black males aged 30-69	8.1	7.6	7.8	6.8	6.2	5.3	5.5	5.4	4.8	5.3		5.6
9.4d American Indians/Alaskan Natives (age-adjusted)				3.2 (Baseline)	3.1	3.1	4.3	3.2	3.8	2.9	4.0	2.8

Barriers:

Lack of simple, quantitative measures predictive of falls in older adults which can be administered during a doctors visit.

Few educational programs that teach older persons fall prevention techniques and/or how to minimize the impact of a fall.

Limited understanding of the costs of falls and fall-related injuries.

Effective interventions such as, polypharmacy, osteoporosis and age-associated gait/balance problems are either of limited availability or remain to be fully implemented.

Hospital and emergency department data are not routinely E-coded, thus circumstances surrounding the fall injury is not consistently recorded in medical records.

Falls are not routinely recorded on death certificates as a contributing cause of death.

Strategies:

Develop and implement interventions to reduce falls in older persons, including the design and remodeling of homes and buildings to accommodate daily activities of elderly residents.

Improve surveillance mechanisms by encouraging hospitals to record external cause of injury codes on injury-related hospital records.

Promote community education for older persons to learn about the availability of safety devices that reduce the risk and severity from an unintentional injury.

Promote healthier lifestyles in early adulthood (e.g., chronic disease prevention, smoking cessation, proper diet), and behavioral strategies that lead to healthier older age.

Develop interventions that raise the public's awareness and lead to the prevention of osteoporosis.

Promote helmet use during recreational activities with significant head injury rates.

Develop guidelines for playground equipment surfaces; conduct epidemiologic research and translate findings into a national implementation plan for playground injuries.

Educate older individuals about potential alcohol/medication interactions and about changes in the effects of alcohol as one ages.

Data Source:
National Vital Statistics System, National Center for Health Statistics, CDC

Objective 9.5: Reduce drowning deaths to no more than 1.3 per 100,000 people

	1987 Baseline	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	2000 Target
Drowning Deaths (per 100,000) ICD-9 Codes: E830, 832, E910 (age-adjusted) Total population	2.1	2.0	1.9	1.9	1.9	1.6	1.7	1.5	1.7	1.5	1.5	1.3
Special Population Targets												
9.5a Children aged 4 and younger	4.3	3.9	3.7	3.4	3.6	3.2	3.2	2.8	3.7	2.8	2.7	2.3
9.5b Males aged 15-34	4.5	4.2	3.9	4.0	4.1	3.4	3.6	3.1	4.6	3.0	---	2.5
9.5c Black Males (age-adjusted)	6.6	5.6	5.4	5.0	5.8	4.1	4.3	4.0	4.1	3.9	3.5	3.6
9.5d American Indians/Alaska Natives (age-adjusted)				4.3 (Baseline)	3.8	4.0	4.3	4.3	3.5	3.3	3.8	2.0

Barriers:

Proven interventions are often perceived as nice, but not neccessary (e.g. water safety training, personal flotation devices (PFDs) when boating).

Interventions create a significant economic burden to pool owners including costs 4-sided of fencing and life guards.

Municipal regulations are often not enforced due to limited personnel.

Currently only three (3) states have laws requiring 4-sided isolation fencing.

Minority populations are less likely to have water safety skills.

Toward lifting requirements for lifeguards at hotels, beaches, and lakes, "Swim at your own risk" policies are becoming more prevalent as many municipalities move.

Alcohol is a risk factor in drowning deaths.

Strategies:

Promote revision of building codes to require 4-sided isolation swimming pool fencing.

Educate the public about hazards of open bodies of water and about the dangers associated with drinking alcohol while engaged in aquatic activities; promote swimming and water safety classes for children and teenagers: promote CPR training for adolescents and parents.

Develop, implement, and evaluate interventions targeted for high risk groups.

Encourage enforcement of laws prohibiting the operation of boats while under the influence of drugs or alcohol.

Promote licensure and standard training for boat operators.

Support research to evaluate risk factors and intervention strategies for alcohol-related drowning and near drowning.

Data Source: *National Vital Statistics System, National Center for Health Statistics, CDC*

Objective 9.6:Reduce residential fire deaths to no more than 1.2 per 100,000 people.

	1987 Baseline	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	2000 Target
Residential Fire Deaths (per 100,000) E890-E899. Total population (age-adjusted)	1.7	1.8	1.7	1.5	1.5	1.4	1.3	1.4	1.2	1.2	1.1	1.2
Special Population Targets												
9.6a Children aged 4 and younger	4.5	4.2	3.9	3.5	3.8	3.4	3.6	3.5	2.6	2.4	2.1	3.3
9.6b People aged 65 and older	4.9	4.9	4.6	4.1	3.9	3.7	3.7	3.5	3.6	3.8	3.5	3.3
9.6c Black Males (age-adjusted)	6.4	7.1	6.0	5.2	5.1	4.9	4.6	4.5	4.2	3.9	3.4	4.3
9.6d Black Females (age-adjusted)	3.3	3.4	3.3	2.7	2.6	2.3	2.6	2.4	2.4	2.1	2.0	2.6
9.6f American Indians/Alaska Natives				2.1 (Baseline)	2.3	2.5	2.5	3.1	3.1	1.9	2.0	1.4
9.6g Puerto Ricans				1.8 (Baseline)	1.4	1.4	1.0	1.1	1.3	1.6	---	2.0
Type Specific Target												
9.6e Residential fire deaths caused by smoking	26%	20%	17%	17%	16%	18%	16%	16%	17%	17%	---	8%

Objective 9.6:Reduce residential fire deaths to no more than 1.2 per 100,000 people.

Barriers:

Smoking, the leading cause of residential fire-related deaths, is perceived as a harmless past-time.

Smoke alarms require monthly maintenance and replacement after ten years of use.

Residents often disconnect smoke alarms due to the "nuisance" factor.

Sprinkler systems are highly effective in extenguishing a fire, however they are costly to retrofit existing homes and apartments.

American Indians/Alaska Natives continue to use woodburning stoves for cooking.

Strategies:

Promote revision of state and local ordinances and building codes to require smoke alarms in new and existing housing.

Encourage requirement for cigarettes sold in the U.S. to have low potential for igniting upholstered furniture. This requirement would include modifications of cigarettes, as well as continued endorsement of standards for furniture manufacture.

Encourage public education that includes positioning of smoke alarms in residences, "stop, drop, and roll" when clothing ignites, the role of alcohol use in residential fires, and the dangers of playing with matches and lighters. Promote development and practice of exit drills in the home

Support research activities to define risk factors associated with survival of residential fires, especially the role of alcohol..

Expand successful intervention programs for juvenile fire-setters, and programs that discourage juvenile curiosity fire-setting.

Develop consensus among fire experts, regulators, and legislators about methods to encourage installation of sprinkler systems in residences and changes in building codes.

Conduct a study that includes focus groups to determine the reasons residents disarm smoke alarms, and do not replace outdated batteries.

Evaluate the efficiacy of home visitation for smoke alarm installation and maintenance, compared to resident's personal responsibility; and determine if firefighters are the most optimal group to conduct home visits to install and maintain smoke alarms.

Develop and implement fire prevention and education programs that target the elderly.

Encourage and support fire departments and emergency response teams to be proactive in preventing residential fires.

Data Sources: *National Vital Statistics System, National Center for Health Statistics, CDC*
National Fire Incident Reporting System, U.S. Fire Administration, FEMA

Objective 9.7: Reduce hip fractures among people aged 65 and older so that hospitalizations for this condition are no more than 607 per 100,000 people.

	1988 Baseline	1989	1990	1991	1992	1993	1994	1995	1996	1997	2000 Target
Hip Fractures (per 100,000) ICD-9 code: E820 People aged 65 and older	714	734	776	814	757	841	815	818	934	879	607
Special Population Target											
9.7aWhite women aged 85 and older	2,721	3,269	3,075	3,091	2,368	3,035	2,815	2,604	2,804	2,879	2,177

Barriers:

More than two-thirds of older adults do not participate in any form of regular physical activity which research finds would increase their agility and balance.

Inadequate dissemination of currently available information on prevention of falls and fractures.

Lack of unified public health strategy to encourage optimal calcium intake in the American population.

Simple measurement tools to evaluate risk for falls and fractures are not available.

Strategies:

Develop, implement, and evaluate behavioral and environmental interventions to reduce falls among seniors.

Conduct further studies of hip pads and impact absorbing flooring to develop an acceptable and cost effective product.

Develop interventions targeted at modifiable risk factors for falls/fractures that have been identified by epidemiological studies.

Determine effectiveness and cost benefit of HRT and/or non-hormonal treatments (e.g. bisphosphonates) in post-menopausal women for the prevention of hip fractures.

Encourage design and construction of new buildings to accommodate the limitations and unique capabilities of seniors.

Encourage inclusion of smoking cessation programs with other chronic disease prevention programs that target older women.

Work with advocacy groups to identify needs of elderly persons; conduct multi-center intervention trials; implement cohort studies similar to the Framingham Study.

Encourage alcohol education programs for older individuals, particularly in terms of potential alcohol/medication interactions and changes in alcohol's effects as one ages.

Data Source: *National Hospital Discharge Survey, National Center for Heath Statistics, CDC*

Objective 9.8 Reduce nonfatal poisoning to no more than 88 emergency department treatments per 100,000 people.

	1986 Baseline	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	2000 Target
Nonfatal Poisoning (per 100,000) Total Population	104	87	73	72	68	64	61	52	43	43	41	41	88
Special Population Target													
9.8a Among Children aged 4 and younger.	664	604	681	636	705	638	626	597	518	499	470	460	520

Barriers:

Failure to properly store poisonous solutions.

Lack of understanding by parents and caretakers about which items are poisonous and non-poisonous.

Lack of sufficient funding has caused poison control centers to cut back on public education.

Supervision of infants and toddlers is often inadequate and/or failure to use proper barrier methods that prevent access to areas where poisonous solutions are stored.

Storage of caustic agents in unlabeled or improper types of containers.

Health care professionals may have insufficient time and/or too few resources to teach and promote poison prevention.

Lack of access to a poison control center may result in adverse affects for persons exposed to a poison by any route (ingestion, inhalation, dermal, ocular, or parenteral).

Strategies:

Support continued funding for poison control centers, assuring that all U.S. residents have immediate access via a toll-free telephone number.

Educate consumers about proper storage of household products and medicines.

Conduct public service campaigns to increase awareness of the poison center phone number and the need to call a center immediately in case of possible poisoning.

Promote adult-friendly child-resistant packaging.

Data Source: *National Electronic Injury Surveillance System, U.S. Consumer Product Safety Commission*